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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,455	10/18/2000	Keiichiro Yoshihara	C14-127596M/YAH	3808
21254	7590	11/30/2004	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			SHAPIRO, LEONID	
		ART UNIT	PAPER NUMBER	
		2673		

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/690,455	YOSHIHARA ET AL.
	Examiner	Art Unit
	Leonid Shapiro	2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 07/26/04.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 1,2,6-10,15 and 22-30 is/are withdrawn from consideration.
- 5) Claim(s) 5,18 and 21 is/are allowed.
- 6) Claim(s) 3,4,11,12,16,17,19-2, 31-32, 36-37 is/are rejected.
- 7) Claim(s) 13,14 and 33-35 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 October 2000 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date: _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claims 3-5, 11: "a first panel being mountable onto a surface of a vehicle" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 3-4, 11-12, 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoru et al. (JP No. 07-160203) in view of Shigemura (US Patent No. 5,075,686) and Sakai et al. (US Patent No. 5, 905,914).

As to claim 3, Satoru et al. teaches a vehicle-mounted apparatus, comprising:

a first panel including a first display, first panel being mountable onto a surface of a vehicle (See Figs 4,6,910,12, items 41,60a,60b,85-87, in Detailed Description See paragraph 0023, 0027, 0030); and

a second panel including a second display, comprising adapting second panel to be opened and closed with respect to first display about a side thereof as an axis (See Figs 4,6-7,9-10,12, items 51,60a,60b,73,85-87 in Detailed Description See paragraphs 0023, 0027, 0029-0030).

Satoru et al. does not teach operating switch changing a function indication according to at least one of whether second panel is open/closed.

Shigemura teaches group of switches and the input functions may changed over by opening or closing the cover (See Fig. 3, items 52-53, in description See Col. 1, Lines 35-40 and Col. 3, Lines 24-49).

It would have been obvious to one of ordinary skill in the art in the time of invention to use the change indications of input functions by opening or closing the cover as shown by Shigemura in the Satoru et al. apparatus in order to effect change-over of the indications by moving indication member (See Col. 1, Lines 63-66 in the Shigemura reference).

Satoru et al. and Shigemura do not teach an operating switch and display panel to be open or close instead of cover of Shigemura.

Sakai et al. teaches an operating switch (See fig. 57, item 156, Col. 63, Lines 40-43) and display panel to be open or close (See Fig. 58, step 222, Col. 64, Lines 4-11).

It would have been obvious to one of ordinary skill in the art in the time of invention to use an operating switch and display panel being closed or open as shown by Sakai et al. in Shigemura and the Satoru et al. apparatus to replace cover by operating switch and display panel in order efficiently realizing function expansion of system without degrading the system (See Col. 5, Lines 51-54 in the Sakai et al. reference).

As to claim 4, Satoru et al. teaches a vehicle-mounted apparatus, comprising:

a first panel including a first display, first panel being mountable onto a surface of a vehicle (See Figs 4,6,910,12, items 41,60a,60b,85-87 in Detailed Description See pages 4-7, paragraph 0023, 0027, 0030); and

a second panel including a second display, comprising adapting second panel to be opened and closed with respect to first display about a side thereof as an

axis, wherein second panel is relatable upside down (See Figs 4,6,910,12, items 51,60a,60b,85-87 in Detailed Description See pages 4-7, paragraph 0023, 0027, 0030).

Satoru et al. does not teach operating switch changing a function indication according to at least one of whether second panel is rotated upside down.

Shigemura teaches group of switches and the input functions may changed over by opening or closing the cover (See Fig. 3, items 52-53, in description See Col. 1, Lines 35-40 and Col. 3, Lines 24-49).

It would have been obvious to one of ordinary skill in the art in the time of invention to use the change indications of input functions by opening or closing the cover as shown by Shigemura in the Satoru et al. apparatus to provide improved construction of the coupling portion between an indication member and an operating member (See from Col. 1, Lines 67 to Col. 2, Line 2 in the Shigemura reference).

Satoru et al. and Shigemura do not teach an operating switch and display panel to be open or close instead of cover of Shigemura.

Sakai et al. teaches an operating switch (See fig. 57, item 156, Col. 63, Lines 40-43) and display panel to be open or close (See Fig. 58, step 222, Col. 64, Lines 4-11).

It would have been obvious to one of ordinary skill in the art in the time of invention to use an operating switch and display panel being closed or open as shown by Sakai et al. in Shigemura and the Satoru et al. apparatus to replace cover by operating switch and display panel in order in order efficiently realizing function

expansion of system without degrading the system (See Col. 5, Lines 51-54 in the Sakai et al. reference).

As to claim 11, Satoru et al. teaches a vehicle-mounted apparatus, comprising:

a first panel including a first display, first panel being mountable onto a surface of a vehicle (See Figs 4,6,910,12, items 41,60a,60b,85-87 in Detailed Description See pages 4-7, paragraph 0023, 0027, 0030); and

a second panel including a second display, comprising adapting second panel to be opened and closed with respect to first display about a side thereof as an axis, wherein second panel is relatable upside down (See Figs 4,6,910,12, items 51,60a,60b,85-87 in Detailed Description See pages 4-7, paragraph 0023, 0027, 0030).

Satoru et al. does not teach operating switch changing a function indication according to at least one of whether second panel is rotated upside down.

Shigemura teaches group of switches and the input functions may changed over by opening or closing the cover (See Fig. 3, items 52-53, in description See Col. 1, Lines 35-40 and Col. 3, Lines 24-49).

It would have been obvious to one of ordinary skill in the art in the time of invention to use the change indications of input functions by opening or closing the cover as shown by Shigemura in the Satoru et al. apparatus in order to provide improved construction of the coupling portion between an indication member and an operating member (See from Col. 1, Lines 67 to Col. 2, Line 2 in the Shigemura reference).

Satoru et al. and Shigemura do not teach an operating switch and display panel to be open or close instead of cover of Shigemura.

Sakai et al. teaches an operating switch (See fig. 57, item 156, Col. 63, Lines 40-43) and display panel to be open or close (See Fig. 58, step 222, Col. 64, Lines 4-11).

It would have been obvious to one of ordinary skill in the art in the time of invention to use an operating switch and display panel being closed or open as shown by Sakai et al. in Shigemura and the Satoru et al. apparatus to replace cover by operating switch and display panel in order in order efficiently realizing function expansion of system without degrading the system (See Col. 5, Lines 51-54 in the Sakai et al. reference).

As to claim 12, Satoru et al. does not teach means for rotating upside down at least one of operating switch and function indication on operating switch when the second panel is rotated upside down.

Shigemura teaches group of switches and the input functions may changed over by opening or closing the cover (See Fig. 3, items 52-53, in description See Col. 1, Lines 35-40 and Col. 3, Lines 24-49).

It would have been obvious to one of ordinary skill in the art in the time of invention to use the change indications of input functions as shown by Shigemura in the Satoru et al. apparatus to changing a function indication according to at least one of whether second panel is rotated upside down in order to provide improved construction

of the coupling portion between an indication member and an operating member (See from Col. 1, Lines 67 to Col. 2, Line 2 in the Shigemura reference).

As to claims 36-37, Shigemura teaches a controlling section that changes a function of operating switch (See Figs. 2-3, 7, items 4, 18, 51, S1-S6, Col. 6, Lines 3-32) and Satoru et al. teaches to display data on at least one of first and second displays in accordance with a position of second panel relative to the first panel (See Figs 4,6, items 41, 5, in Detailed Description See paragraph 0023).

2. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoru et al., Sakai et al. and Shigemura as applied to claims above, and further in view of Chan et al. (US Patent No. 6,339,696 B1).

Satoru et al., Sakai et al. and Shigemura do not show means for displaying a current audio source on at least one of first and second displays.

Chan et al. teaches audio/video source within the vehicle provides video programming to the display device corresponding to the audio signal (See Figs. 1, 8, items 12, 16, 206, in description See Col. 4, Lines 32-35 and Col. 9, lines 15-22).

It would have been obvious to one of ordinary skill in the art in the time of invention to display current a video/audio source as shown by Chan et al. in the Satoru et al., Sakai et al. and Shigemura apparatus in order to satisfy the need for in-vehicle audio/video system (See Col. 1, Lines 34-35 in Chan et al. reference).

3. Claims 19-20, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Satoru et al., Sakai et al. and Shigemura as applied to claims above, and further in view of Narayanaswamy et al. (US Patent No. 6,144,358).

As to claims 19-20, Satoru et al., Sakai et al. and Shigemura do not show means detecting a position of second panel by a predetermined angle in terms of at least one of the open/close action and rotation and means for switching an input source upon detecting.

Narayanaswamy et al. teaches means detecting a position of second panel by a predetermined angle in terms of at least one of the open/close action and rotation (See Fig. 1A and 1B, items 102, 104, 106, in description See Col. 2, Lines 16-43) and means for switching an input source upon detecting (See Fig. 2, items 202,204, in description See Col. 3, Lines 34-50).

It would have been obvious to one of ordinary skill in the art in the time of invention to detect a position of second panel by a predetermined angle in terms of at least one of the open/close action and rotation and means for switching an input source upon detecting as shown by Narayanaswamy et al. in the Satoru et al., Sakai et al. and Shigemura apparatus in order to present more usable information to the user (See Col. 1, Lines 40-43 in Narayanaswamy et al. reference).

As to claims 31-32, Satoru et al., Sakai et al. and Shigemura do not show second panel includes at least one control switch on a back surface of second panel, one control switch being exposed for operability when second panel is closed relative to the first panel.

Narayanaswamy et al. teaches show second panel includes at least one control switch on a back surface of second panel, one control switch being exposed for operability when second panel is closed relative to the first panel (See Fig. 1A, item 100, Col. 2, Lines 16-26).

It would have been obvious to one of ordinary skill in the art in the time of invention to incorporate teaching of Narayanaswamy et al. into the Satoru et al., Sakai et al. and Shigemura a system in order to present more usable information to the user (See Col. 1, Lines 40-43 in Narayanaswamy et al. reference).

#### ***Allowable Subject Matter***

4. Claim 5, 18, 21 are allowed.
5. Claims 13-14, 33-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Relative to independent claim 5 and claims 13-14 the major difference between the teaching of the prior art of record (Satoru et al., Shigemura and Sakai et al.) and the instant invention is that the said prior art **does not** teach specific structures (gearing) in conjunction with multi-display with changeable function switches.

Claims 18 and 21 depend on claim 5.

Relative to claim 33 the major difference between the teaching of the prior art of record (Satoru et al., Shigemura and Sakai et al.) and the instant invention is that second panel is rotatable when second panel is positioned in other than a closed

Art Unit: 2673

position, and second display is exposed when second panel is then positioned into closed position.

Relative to claims 34-35 the major difference between the teaching of the prior art of record (Satoru et al., Shigemura and Sakai et al.) and the instant invention is that the said prior art **does not** teach second panel has a size that allows a portion of first display to remain visible when second panel is closed relative to the first panel and can be activated when second panel is closed.

6. Applicant's arguments filed on 07.26.04 have been fully considered but they are not persuasive:

On page 11, 3<sup>rd</sup>-4<sup>th</sup> paragraphs of Remarks, Applicant's stated that Satoru et al. does not show first panel is mountable onto surface of a vehicle. However, Examiner strongly disagree. Sufficient to look at Drawing 4 of Satori et al. to recognize that the first panel mounted on the surface of vehicle (See Drawing 4, item 41).

On the same Page, last paragraph Applicant stated, that Satoru et al. does not show "...second panel being openable and closable with respect to first display about a side thereof as an axis". However, Examiner strongly disagreed. Sufficient to look at Drawing 10 of Satori et al. to recognize that second panel being openable and closable with respect to first display about a side thereof as an axis (See Fig. 10, item 86).

On page 12, 5<sup>th</sup> paragraph Applicant stated, that Satoru et al. could not be modified because such modification would clearly defeat the principle operation.

However, Examiner disagreed. Adding new mechanical features will not change the principle of operation of reference.

In response to Applicant's argument on page 13, 2<sup>nd</sup> paragraph that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

On pages 13-17, Applicant's stated that there is no motivation to combine references and that the desirability of the combination and modifications need to be suggested in the prior art. However, rejection shows motivation in the prior art (See Col. 1, Lines 63-66 in Shigemura reference and Col. 5, Lines 51-54 Sakai et al. ).

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Telephone inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/690,455  
Art Unit: 2673

Page 14

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**VIJAY SHANKAR  
PRIMARY EXAMINER**